

Figure 1: Angular dependence of optical retardance under the SAT model's θ_4 field. The periodic \sin^2 modulation represents twist-induced optical phase effects, with dashed lines indicating τ_1 and τ_2 sector boundaries.

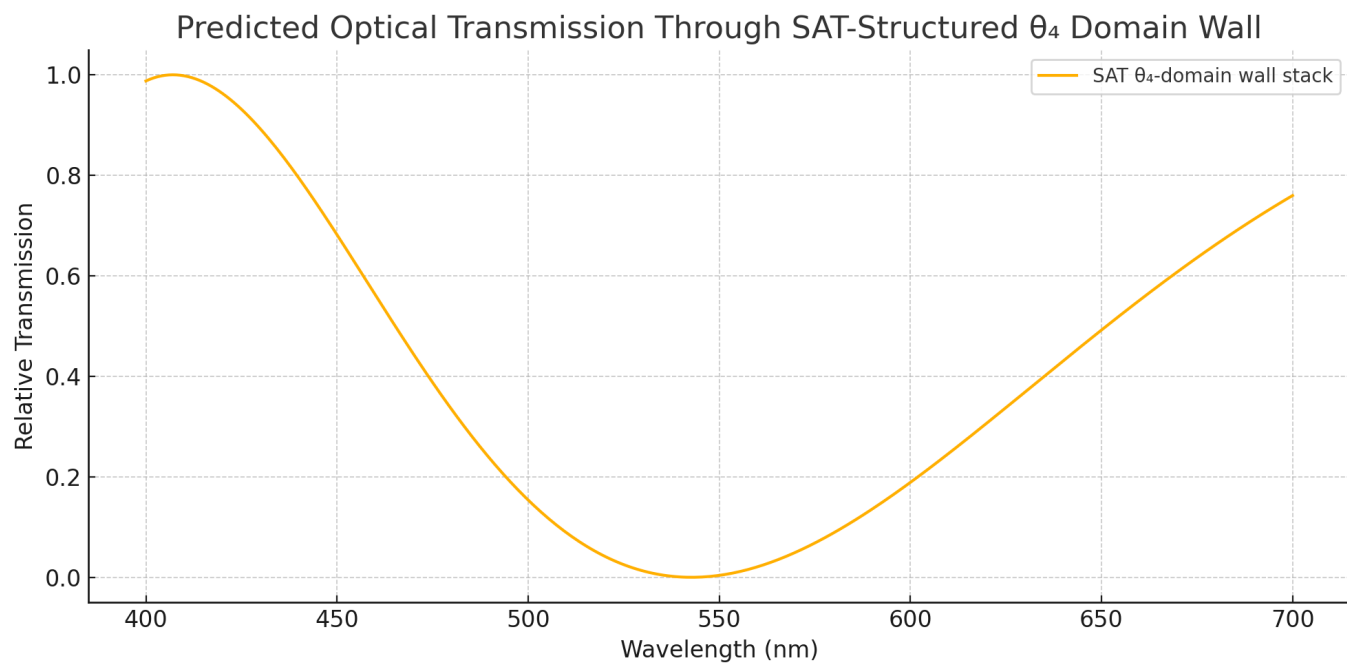


Figure 2: Predicted optical transmission through a SAT-structured θ_4 domain wall. Note the non-sinusoidal spectral profile arising from cumulative birefringent stacking.

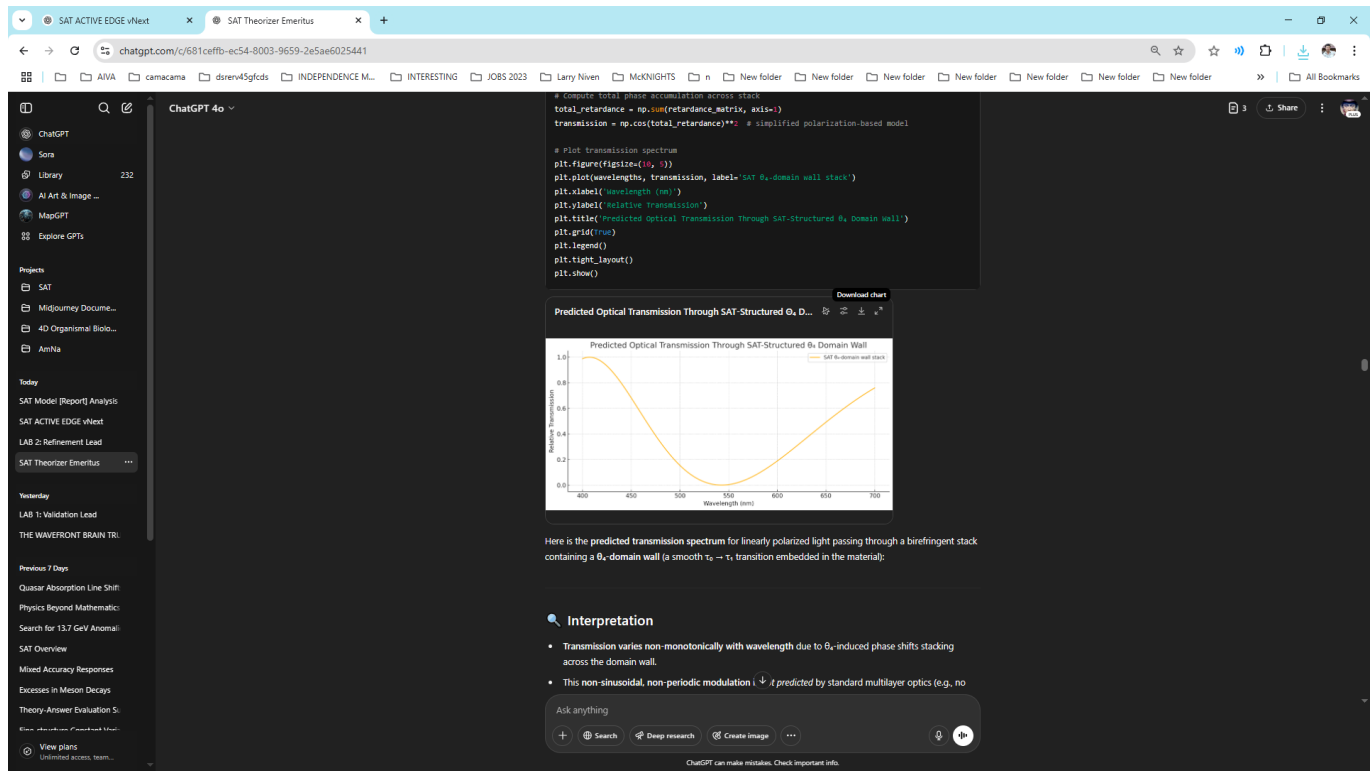


Figure 3: Screenshot showing code used to generate the SAT domain wall optical simulation. This was one of EmeritusGPT's earliest live coding sessions in the SAT development process.

Theta_4 Kink and Induced Refractive Index
Total Phase Shift $\Delta\phi \approx 0.1629$ radians

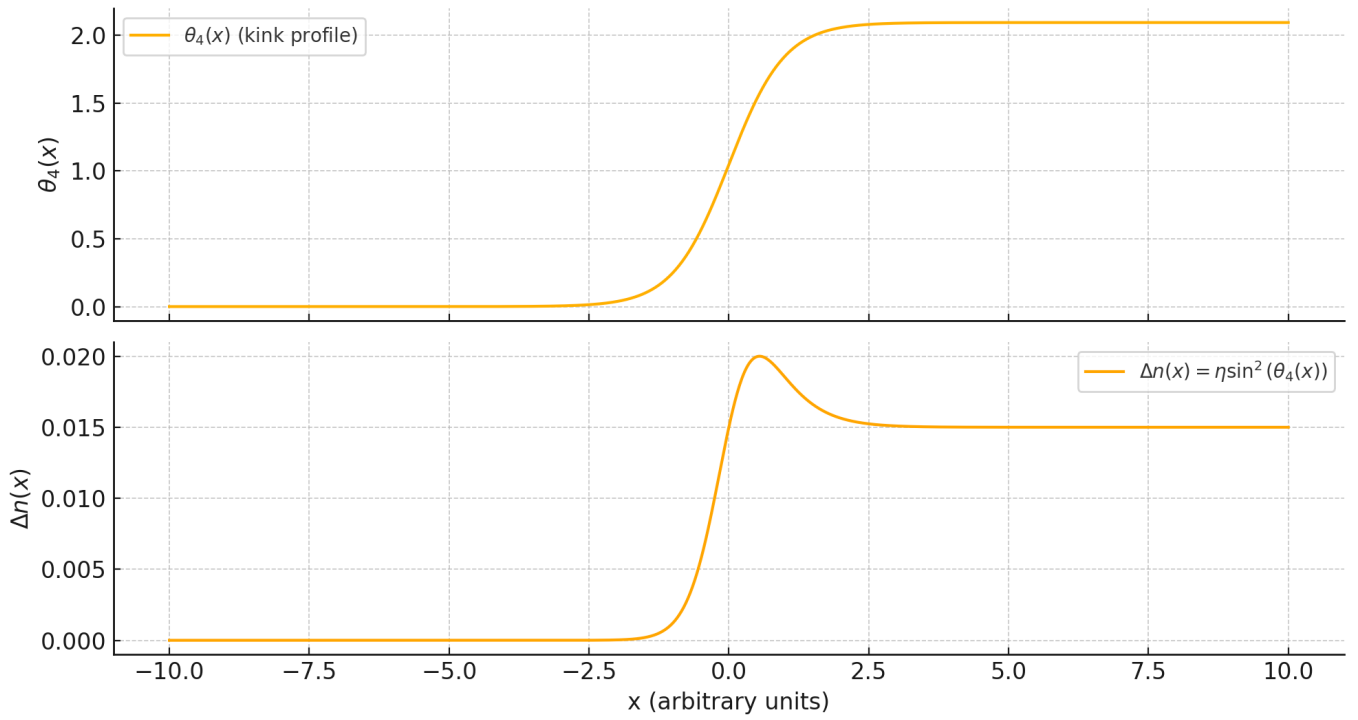


Figure 4: Theta_4 kink profile inducing a smooth refractive index modulation. Below, the derived $\Delta n(x)$ profile shows localized birefringent shifts critical for predicting SAT optical properties.

Random τ Lattice

Allowed Triplets: 0.327

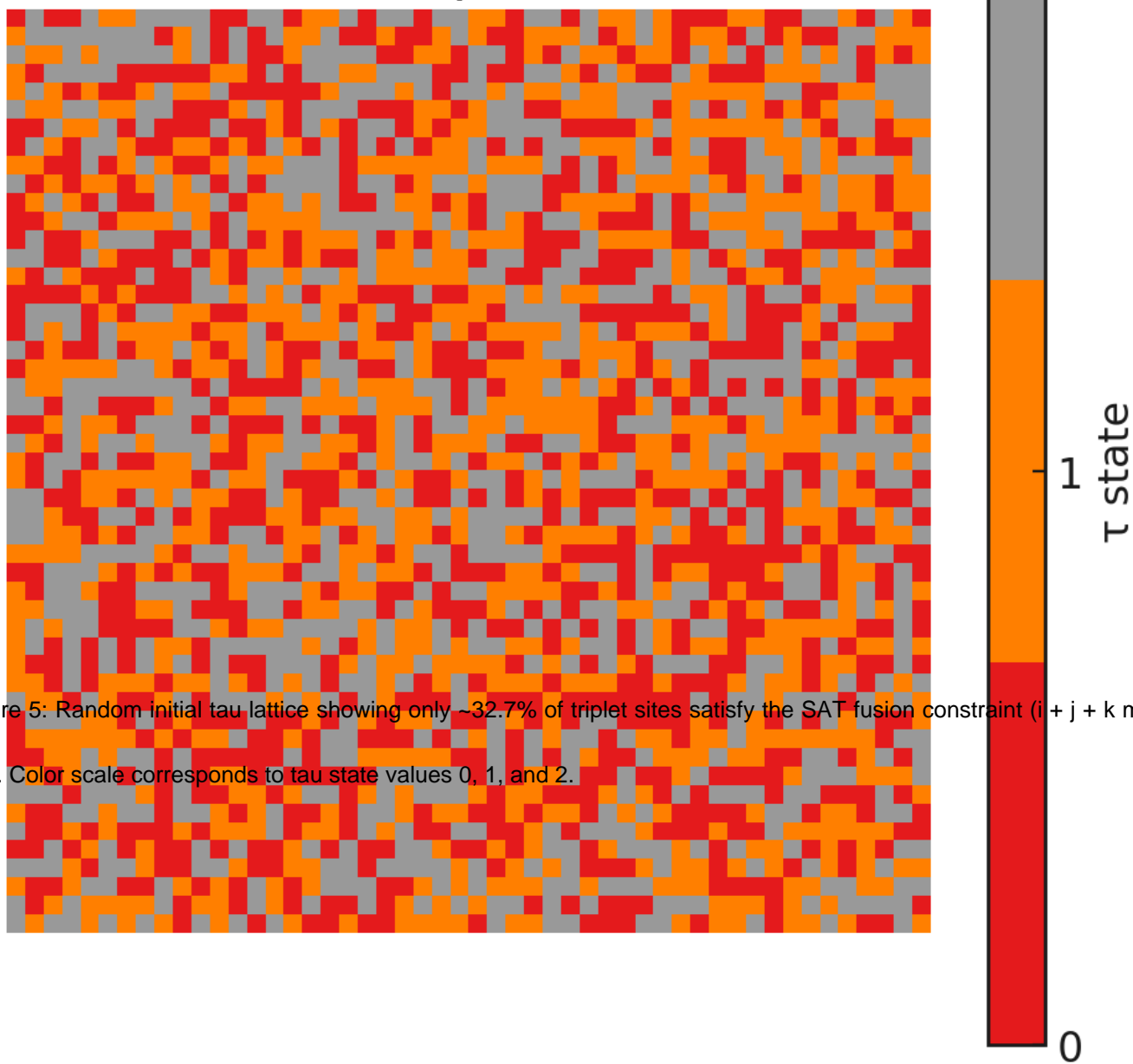


Figure 5: Random initial tau lattice showing only ~32.7% of triplet sites satisfy the SAT fusion constraint ($i + j + k \bmod 3 = 0$). Color scale corresponds to tau state values 0, 1, and 2.

Final τ Lattice After Fusion Evolution

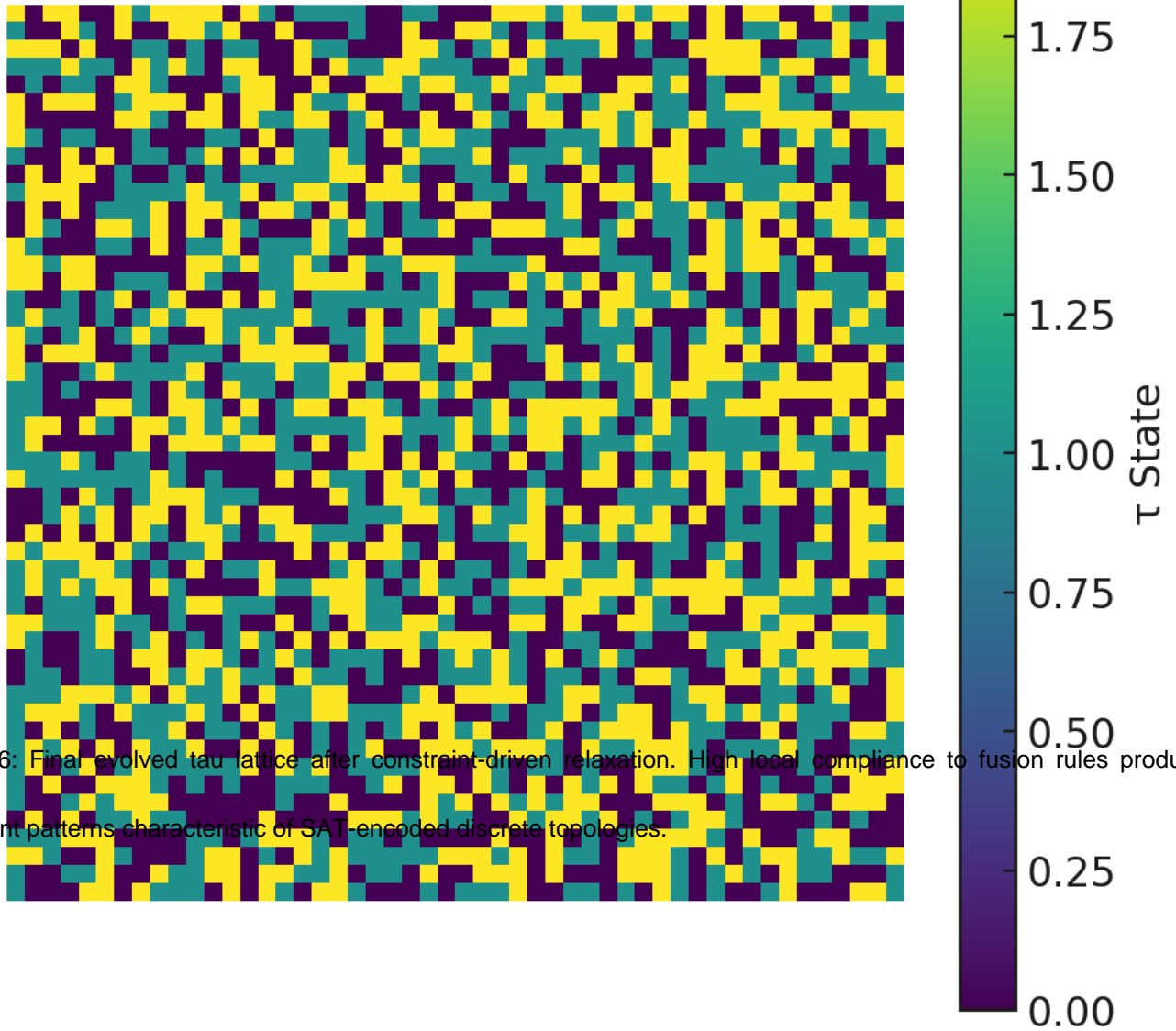


Figure 6: Final evolved tau lattice after constraint-driven relaxation. High local compliance to fusion rules produces emergent patterns characteristic of SAT-encoded discrete topologies.